

## WHAT IS CLAIMED

1 1. For a digital television packet stream having a plurality of different types of  
2 tables, a method to determine issuance intervals for like types of said tables,  
3 respectively, that do not all have fixed issuance intervals set by a governing  
4 standard, the method comprising:

5 setting issuance intervals for like ones of the non-governed tables,  
6 respectively, to be non-uniform.

1 2. The method of claim 1, wherein each of the non-uniform issuance intervals is  
2 determined as a function of at least one of an amount of time in the future to which  
3 the table corresponds and a degree of probable interest to a viewer.

1 3. The method of claim 2, wherein said issuance intervals are weighted so that  
2 an issuance interval for a table corresponding to a time nearer the present is smaller  
3 than an issuance interval corresponding to a time further in the future.

1 4. The method of claim 1, wherein each issuance interval between any two  
2 instances of an  $i^{\text{th}}$  table is determined according to the following equation:

3  
4 
$$\text{interval}(i^{\text{th}} \text{ table}) = \text{root\_time} + (\text{increment\_time}) * i,$$
  
5

6 wherein  $\text{interval}(i^{\text{th}} \text{ table})$  is the interval between any two instances of the  $i^{\text{th}}$  table,  
7  $\text{root\_time}$  is a predetermined interval for the table corresponding most closely in time  
8 to the present,  $\text{increment\_time}$  is a non-zero scalar and  $i$  is a non-zero integer.

1 5. The method of claim 1, wherein said tables are at least one of extended text  
2 tables (ETTs) or extended information tables (EITs) defined within the program and  
3 system information protocol (PSIP).

1 6. A program and system information protocol (PSIP) generator to generate  
2 tables for a digital television system packet stream, the generator comprising:  
3 an interface to receive at least one issuance parameter for like tables that do  
4 not all have an issue interval assigned by a governing standard; and  
5 a non-uniform interval calculation unit to determine non-uniform issuance  
6 intervals for unassigned-interval-ones of said tables based upon said at least one  
7 issuance parameter.

1 7. The PSIP generator of claim 6, wherein each of the non-uniform issuance  
2 intervals is determined as a function of at least one of an amount of time in the future  
3 to which the table corresponds and a degree of probable interest to a viewer.

1 8. The PSIP generator of claim 7, wherein said issuance intervals are weighted  
2 so that an issuance interval for a table corresponding to a time near the present is  
3 smaller than an issuance interval corresponding to a time further in the future.

1 9. The PSIP generator of claim 6, wherein each issuance interval between any  
2 two instances of an  $i^{\text{th}}$  table is determined according to the following equation:  
3

$$\text{interval}(i^{\text{th}} \text{ table}) = \text{root\_time} + (\text{increment\_time}) * i,$$

4  
5  
6 wherein  $\text{interval}(i^{\text{th}} \text{ table})$  is the interval between any two instances of the  $i^{\text{th}}$  table,  
7  $\text{root\_time}$  is a predetermined interval for the table corresponding most closely in time  
8 to the present,  $\text{increment\_time}$  is a non-zero scalar and  $i$  is a non-zero integer, and

9            wherein said at least one issuance parameter is at least one of said root\_time  
10        and said increment\_time.

1        10.    The PSIP generator of claim 6, wherein said tables are at least one of  
2        extended text tables (ETTs) or extended information tables (EITs).

1        11.    The PSIP generator of claim 6, wherein said PSIP generator is embodied in  
2        the form of a processor running software.

1        12.    The PSIP generator of claim 6, wherein said software is written in the  
2        computer language Java.

1        13.    A processor-readable article of manufacture having embodied thereon  
2        software comprising a plurality of code segments to perform the method of any one  
3        of claim 1, respectively.

1        14.    A processor-readable article of manufacture having embodied thereon  
2        software comprising a plurality of code segments to cause a processor to perform  
3        the functional aspects of the program and system information protocol (PSIP)  
4        generator of claim 6.